SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT:

(A) NAME: Richard R. Bott
(B) STREET: 3032 Hillside Drive
(C) CITY: Burlingame
(D) STATE: CA
(E) COUNTRY: USA
(F) POSTAL CODE (ZIP): 94010
(G) TELEPHONE: (415) 846-7200

(A) NAME: Kathleen A. Clarkson
(B) STREET: 53 28th St
(C) CITY: San Francisco
(D) STATE: CA
(E) COUNTRY: USA
(F) POSTAL CODE (ZIP): 94110
(G) TELEPHONE: (415) 846-7200

(A) NAME: Timothy Fowler
(B) STREET: 1000 Continental Way, #304
(C) CITY: Belmont
(D) STATE: CA
(E) COUNTRY: USA
(F) POSTAL CODE (ZIP): 94002
(G) TELEPHONE: (415) 846-7200

(A) NAME: Chung-Cheng Liu
(B) STREET: 4866 Alberson Ct
(C) CITY: San Diego
(D) STATE: CA
(E) COUNTRY: USA
(F) POSTAL CODE (ZIP): 92130
(G) TELEPHONE: (415) 846-7200

(A) NAME: Micheal Ward
(B) STREET: 4372 24th St.
(C) CITY: San Francisco
(D) STATE: CA
(E) COUNTRY: USA
(F) POSTAL CODE (ZIP): 94114
(G) TELEPHONE: (415) 846-7200

(A) NAME: Hai-Ying Xia
(B) STREET: 625 Dartmouth St.
(C) CITY: San Francisco
(D) STATE: CA
(E) COUNTRY: USA
(F) POSTAL CODE (ZIP): 94134
(G) TELEPHONE: (415) 846-7200

(ii) TITLE OF INVENTION: Enzymatic Array and Process of Making Same

(iii) NUMBER OF SEQUENCES: 29

(iv) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)

(v) CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 08/559,968
(vi) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: US 60/005701
(B) FILING DATE: 17-OCT-1995

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

TGCAGCTCGT GTTCTGTACG GTGACGTTAA CGACGACGGT AAAGTTAACT CCACCGACCT 60

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

GACCCTGCTG AAACGTTACG TTCTGAAAGC TGTTTCCACC CTGCCGTCCT CCAAAGCTGA 60

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

AAAAAACGCT GACGTTAACC GTGACGGTCG TGTTAACTCC TCCGACGTTA CCATCCTGTC 60

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 41 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CCGTTACCTG ATCCGTGTTA TCGAAAAACT GCCGATCTAA C 41

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

TGCAGTTAGA TCGGCAGTTT TTCGATAACA CGGATCAGGT AACGGGACAG GATGGTAACG 60

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TCGGAGGAGT TAACACGACC GTCACGGTTA ACGTCAGCGT TTTTTTCAGC TTTGGAGGAC 60

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

GGCAGGGTGG AAACAGCTTT CAGAACGTAA CGTTTCAGCA GGGTCAGGTC GGTGGAGTTA 60

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 41 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

ACTTTACCGT CGTCGTTAAC GTCACCGTAC AGAACACGAG C 41

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 40 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

CATGCAACTC TGCAGCTCGT GTTCTGTACG GTGACGTTAA 40

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 40 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

TACCAGATCC TGCAGTTAGA TCGGCAGTTT TTCGATAACA 40

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

TGCAGCTCGT AAACTGTACG GTGACGTTAA CGACGACGGT AAAGTTAACT CCACCGACGC 60

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

TGTTGCTCTG AAACGTTACG TTCTGCGTTC CGGTATCTCC ATCAACACCG ACAACGCGGA 60

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

CCTGAACGAA GACGGTCGTG TTAACTCCAC CGACCTGGGT ATCCTGAAAC GTTACATCCT 60

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 35 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

GAAAGAAATC GACACCCTGC CGTACAAAAA CTAAC 35

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

TGCAGTTAGT TTTTGTACGG CAGGGTGTCG ATTTCTTTCA GGATGTAACG TTTCAGGATA 60

(2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

CCCAGGTCGG TGGAGTTAAC ACGACCGTCT TCGTTCAGGT CCGCGTTGTC GGTGTTGATG 60

(2) INFORMATION FOR SEQ ID NO: 17:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

GAGATACCGG AACGCAGAAC GTAACGTTTC AGAGCAACAG CGTCGGTGGA GTTAACTTTA 60

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 35 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

CCGTCGTCGT TAACGTCACC GTACAGTTTA CGAGC 35

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 40 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

CATGCATCAC TGCAGCTCGT AAACTGTACG GTGACGTTAA 40

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 40 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

TCAGACCTAC TGCAGTTAGT TTTTGTACGG CAGGGTGTCG 40

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 43 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

CGAGCGCCGC GGGCTTGTTC TGTACGGTGA CGTTAACGAC GAC 43

(2) INFORMATION FOR SEQ ID NO: 22:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 43 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

AGCCAGCCGC GGTTAGATCG GCAGTTTTTC GATAACACGG ATC 43

(2) INFORMATION FOR SEQ ID NO: 23:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 43 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

CGAGCGCCGC GGGCTTAAAC TGTACGGTGA CGTTAACGAC GAC 43

(2) INFORMATION FOR SEQ ID NO: 24:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 43 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

AGCCAGCCGC GGTTAGTTTT TGTACGGCAG GGTGTCGATT TCT 43

(2) INFORMATION FOR SEQ ID NO: 25:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 27 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

GAAATACCTA TACATATGAA AGGAGTG 27

(2) INFORMATION FOR SEQ ID NO: 26:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 25 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

TGGATGGTAT ACCACTGAAT CTTAC 25

(2) INFORMATION FOR SEQ ID NO: 27:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 69 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: unknown
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27:

Val Leu Tyr Gly Asp Val Asn Asp Asp Gly Lys Val Asn Ser Thr Asp
1 5 10 15

Leu Thr Leu Leu Lys Arg Tyr Val Leu Lys Ala Val Ser Thr Leu Pro
20 25 30

Ser Ser Lys Ala Glu Lys Asn Ala Asp Val Asn Arg Asp Gly Arg Val
35 40 45

Asn Ser Ser Asp Val Thr Ile Leu Ser Arg Tyr Leu Ile Arg Val Ile
50 55 60

Glu Lys Leu Pro Ile
65

(2) INFORMATION FOR SEQ ID NO: 28:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 67 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: unknown
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28:

Lys Leu Tyr Gly Asp Val Asn Asp Asp Gly Lys Val Asn Ser Thr Asp
1 5 10 15

Ala Val Ala Leu Lys Arg Tyr Val Leu Arg Ser Gly Ile Ser Ile Asn
20 25 30

Thr Asp Asn Ala Asp Leu Asn Glu Asp Gly Arg Val Asn Ser Thr Asp
35 40 45

Leu Gly Ile Leu Lys Arg Tyr Ile Leu Lys Glu Ile Asp Thr Leu Pro
50 55 60

Tyr Lys Asn
65

(2) INFORMATION FOR SEQ ID NO: 29:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 531 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: unknown
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29:

Gly Val Pro Ser Lys Gly Met Ala Asn Cys Asp Phe Val Leu Gly Tyr
1 5 10 15

Asp Pro Asn Val Leu Glu Val Thr Glu Val Lys Pro Gly Ser Ile Ile
20 25 30

Lys Asp Pro Asp Pro Ser Lys Ser Phe Asp Ser Ala Ile Tyr Pro Asp
35 40 45

Arg Lys Met Ile Val Phe Leu Phe Ala Glu Asp Ser Gly Arg Gly Thr
50 55 60

Tyr Ala Ile Thr Gln Asp Gly Val Phe Ala Thr Ile Val Ala Thr Val
65 70 75 80

Lys Ser Ala Ala Ala Ala Pro Ile Thr Leu Leu Glu Val Gly Ala Phe
85 90 95

Ala Asp Asn Asp Leu Val Glu Ile Ser Thr Thr Phe Val Ala Gly Gly
100 105 110

Val Asn Leu Gly Ser Ser Val Pro Thr Thr Gln Pro Asn Val Pro Ser
115 120 125

Asp Gly Val Val Val Glu Ile Gly Lys Val Thr Gly Ser Val Gly Thr
130 135 140

Thr Val Glu Ile Pro Val Tyr Phe Arg Gly Val Pro Ser Lys Gly Ile
145 150 155 160

Ala Asn Cys Asp Phe Val Phe Arg Tyr Asp Pro Asn Val Leu Glu Ile
165 170 175

Ile Gly Ile Asp Pro Gly Asp Ile Ile Val Asp Pro Asn Pro Thr Lys
180 185 190

Ser Phe Asp Thr Ala Ile Tyr Pro Asp Arg Lys Ile Ile Val Phe Leu
195 200 205

Phe Ala Glu Asp Ser Gly Thr Gly Ala Tyr Ala Ile Thr Lys Asp Gly
210 215 220

Val Phe Ala Lys Ile Arg Ala Thr Val Lys Ser Ser Ala Pro Gly Tyr
225 230 235 240

Ile Thr Phe Asp Glu Val Gly Gly Phe Ala Asp Asn Asp Leu Val Glu
245 250 255

Gln Lys Val Ser Phe Ile Asp Gly Gly Val Asn Val Gly Asn Ala Thr
260 265 270

Pro Thr Lys Gly Ala Thr Pro Thr Asn Thr Ala Thr Pro Thr Lys Ser
275 280 285

Ala Thr Ala Thr Pro Thr Arg Pro Ser Val Pro Thr Asn Thr Pro Thr
290 295 300

Asn Thr Pro Ala Asn Thr Pro Val Ser Gly Asn Leu Lys Val Glu Phe
305 310 315 320

Tyr Asn Ser Asn Pro Ser Asp Thr Thr Asn Ser Ile Asn Pro Gln Phe
325 330 335

Lys Val Thr Asn Thr Gly Ser Ser Ala Ile Asp Leu Ser Lys Leu Thr
340 345 350

Leu Arg Tyr Tyr Tyr Thr Val Asp Gly Gln Lys Asp Gln Thr Phe Trp
355 360 365

Cys Asp His Ala Ala Ile Ile Gly Ser Asn Gly Ser Tyr Asn Gly Ile
370 375 380

Thr Ser Asn Val Lys Gly Thr Phe Val Lys Met Ser Ser Ser Thr Asn
385 390 395 400

Asn Ala Asp Thr Tyr Leu Glu Ile Ser Phe Thr Gly Gly Thr Leu Glu
405 410 415

Pro Gly Ala His Val Gln Ile Gln Gly Arg Phe Ala Lys Asn Asp Trp
420 425 430

Ser Asn Tyr Thr Gln Ser Asn Asp Tyr Ser Phe Lys Ser Ala Ser Gln
435 440 445

Phe Val Glu Trp Asp Gln Val Thr Ala Tyr Leu Asn Gly Val Leu Val
450 455 460

Trp Gly Lys Glu Pro Gly Gly Ser Val Val Pro Ser Thr Gln Pro Val
465 470 475 480

Thr Thr Pro Pro Ala Thr Thr Lys Pro Pro Ala Thr Thr Lys Pro Pro
485 490 495

Ala Thr Thr Ile Pro Pro Ser Asp Asp Pro Asn Ala Ile Lys Ile Lys
500 505 510

Val Asp Thr Val Asn Ala Lys Pro Gly Asp Thr Val Asn Ile Pro Val
515 520 525

Arg Phe Ser
530